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nucleic acid synthesis and amplification in vitro

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Pub. No. 250350

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Met Gln Glu Thr Lys Val Glu Asn Arg Lys Phe Pro Glu Ala Asp Phe	
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cac cgc atc ggc tac cac gtc gtc ttc agc ggg agc aag gga agg aat	192
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gga gtg gcc ata gct tcc ctc gaa gag cct gag gat gtc agc ttc ggt	240
Gly Val Ala Ile Ala Ser Leu Glu Glu Pro Glu Asp Val Ser Phe Gly	
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ctc gat tca gag ccg aag gac gag gac agg ctg ata agg gca aag ata	288
Leu Asp Ser Glu Pro Lys Asp Glu Asp Arg Leu Ile Arg Ala Lys Ile	
85 90 95	
gct ggc ata gac gtg att aac acc tac gtt cct cag gga ttc aaa att	336
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100 105 110	
gac agc gag aag tac cag tac aag ctc cag tgg ctt gag agg ctt tac	384
Asp Ser Glu Lys Tyr Gln Tyr Lys Leu Gln Trp Leu Glu Arg Leu Tyr	
115 120 125	
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His Tyr Leu Gln Lys Thr Val Asp Phe Arg Ser Phe Ala Val Trp Cys	
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Gly Asp Met Asn Val Ala Pro Glu Pro Ile Asp Val His Ser Pro Asp	
145 150 155 160	

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Lys Leu Lys Asn His Val Cys Phe His Glu Asp Ala Arg Arg Ala Tyr
165 170 175

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Lys Lys Ile Leu Glu Leu Gly Phe Val Asp Val Leu Arg Lys Ile His
180 185 190

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Pro Leu Ala Glu Arg Cys Val Asp Cys Tyr Ala Asp Ile Lys Pro Arg
225 230 235 240

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35 40 45

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Gly Val Ala Ile Ala Ser Leu Glu Glu Pro Glu Asp Val Ser Phe Gly
65 70 75 80

Leu Asp Ser Glu Pro Lys Asp Glu Asp Arg Leu Ile Arg Ala Lys Ile
85 90 95

Ala Gly Ile Asp Val Ile Asn Thr Tyr Val Pro Gln Gly Phe Lys Ile
100 105 110

Asp Ser Glu Lys Tyr Gln Tyr Lys Leu Gln Trp Leu Glu Arg Leu Tyr
115 120 125

His Tyr Leu Gln Lys Thr Val Asp Phe Arg Ser Phe Ala Val Trp Cys
130 135 140

Gly Asp Met Asn Val Ala Pro Glu Pro Ile Asp Val His Ser Pro Asp
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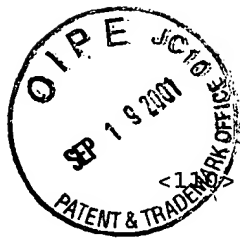
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Leu Ala Glu Lys Pro Ser Asp His Leu Pro Leu Val Ala Val Phe Asp
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Val



SEQUENCE LISTING

ANKENBAUER, WALTRAUD

LAUE, FRANK

SOBEK, HERALD

GREIF, MICHAEL

<120> Thermostable Enzyme Promoting The Fidelity Of Thermostable DNA
Polymerases For Improvement Of Nucleic Acid Synthesis And Amplification
In Vitro

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<140> US 09/856,850

<141> 2001-05-25

<150> PCT/EP00/09423

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Ala	Gly	Ile	Asp	Val	Ile	Asn	Thr	Tyr	Val	Pro	Gln	Gly	Phe	Lys	Ile	
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Asp	Ser	Glu	Lys	Tyr	Gln	Tyr	Lys	Leu	Gln	Trp	Leu	Glu	Arg	Leu	Tyr	
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Lys	Leu	Lys	Asn	His	Val	Cys	Phe	His	Glu	Asp	Ala	Arg	Arg	Ala	Tyr	
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aaa	aaa	ata	ctc	gaa	ctc	ggc	ttt	gtt	gac	gtg	ctg	aga	aaa	ata	cat	576
Lys	Lys	Ile	Leu	Glu	Leu	Gly	Phe	Val	Asp	Val	Leu	Arg	Lys	Ile	His	
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Leu Ala Glu Lys Pro Ser Asp His Leu Pro Leu Val Ala Val Phe Asp

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gtg tag 774

Val

<210> 18

<211> 257

<212> PRT

<213> Archaeoglobus fulgidus

<400> 18

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His Ile Val Ile Pro Trp Leu Lys Glu Asn Lys Pro Asp Ile Leu Cys

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Met Gln Glu Thr Lys Val Glu Asn Arg Lys Phe Pro Glu Ala Asp Phe

 35 40 45

His Arg Ile Gly Tyr His Val Val Phe Ser Gly Ser Lys Gly Arg Asn

 50 55 60

Gly Val Ala Ile Ala Ser Leu Glu Glu Pro Glu Asp Val Ser Phe Gly

65 70 75 80

Leu Asp Ser Glu Pro Lys Asp Glu Asp Arg Leu Ile Arg Ala Lys Ile

 85 90 95

Ala Gly Ile Asp Val Ile Asn Thr Tyr Val Pro Gln Gly Phe Lys Ile

 100 105 110

Asp Ser Glu Lys Tyr Gln Tyr Lys Leu Gln Trp Leu Glu Arg Leu Tyr

 115 120 125

His Tyr Leu Gln Lys Thr Val Asp Phe Arg Ser Phe Ala Val Trp Cys

 130 135 140

Gly Asp Met Asn Val Ala Pro Glu Pro Ile Asp Val His Ser Pro Asp
145 150 155 160

Lys Leu Lys Asn His Val Cys Phe His Glu Asp Ala Arg Arg Ala Tyr
165 170 175

Lys Lys Ile Leu Glu Leu Gly Phe Val Asp Val Leu Arg Lys Ile His
180 185 190

Pro Asn Glu Arg Ile Tyr Thr Phe Tyr Asp Tyr Arg Val Lys Gly Ala
195 200 205

Ile Glu Arg Gly Leu Gly Trp Arg Val Asp Ala Ile Leu Ala Thr Pro
210 215 220

Pro Leu Ala Glu Arg Cys Val Asp Cys Tyr Ala Asp Ile Lys Pro Arg
225 230 235 240

Leu Ala Glu Lys Pro Ser Asp His Leu Pro Leu Val Ala Val Phe Asp
245 250 255

Val